

# City of Bellevue Development Services Department Land Use Staff Report

Proposal Name: Captain Residence

Proposal Address: 1258 W Lake Sammamish Pkwy SE

Proposal Description: Proposal to construct a new single-family residential

structure within a steep slope, steep slope buffer, and steep slope structure setback. The proposal includes mitigation and restoration planting, and is supported by a critical areas report and geotechnical report.

File Number: 20-110765-LO

Applicant: Dan Buchser, MacPherson Construction & Design

LLC

**Decisions Included:** Critical Areas Land Use Permit

(Process II. LUC 20.30P)

Planner: David Wong, Planner

State Environmental Policy Act

Threshold Determination: Exempt per WAC 197-11-800 (1)

Director's Decision: Approval with Conditions

Heidi Bedwell, Planning Manager

Elizabeth Stead, Land Use Director

Development Services Department

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Application Date:

Notice of Application Publication Date:

Decision Publication Date:

June 25, 2020

July 30, 2020

December 31, 2020

Project/SEPA Appeal Deadline: December 31, 2021

For information on how to appeal a proposal, visit Development Services Center at City Hall or call (425) 452-6800. Comments on State Environmental Policy Act (SEPA) Determinations can be made with or without appealing the proposal within the noted comment period for a SEPA Determination. Appeal of the Decision must be received in the City's Clerk's Office by 5 PM on the date noted for appeal of the decision.

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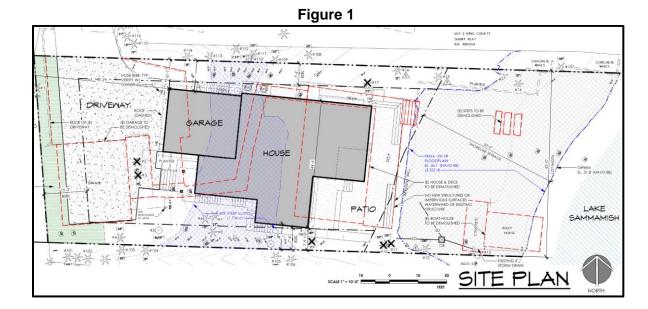
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# **Attachments**

- 1. Site Plan
- 2. Mitigation & Restoration Planting Plan
- 3. Critical Areas Report Altmann Oliver Associates, LLC dated 12/03/2020 (in file)
- Geotechnical Report Cobalt Geoservices, LLC dated 06/22/2020 (in file)
   Arborist Report Layton Tree Consulting, LLC dated 12/06/2019 (in file)

# I. Proposal Description

The applicant has requested a Critical Areas Land Use Permit to construct an approximately 2,398 square-foot single-family residential structure within a regulated steep slope critical area, steep slope buffer, and steep slope structure setback. The existing home and garage will be demolished, and the proposed improvements have been organized on site to utilize much of the existing developed and disturbed area. This proposal also includes approximately 2,530 square feet of native restoration and mitigation planting within the steep slope, steep slope buffer, steep slope structure setback, and floodplain. See Figure 1 below for site layout.



A Critical Areas Land Use permit is required to modify a critical area, critical area buffers, and critical area structure setbacks.

Land Use Code (LUC) 20.25H.120.B prescribes a 50-foot critical area buffer from the surveyed top-of-slope. The request is to permanently modify a portion of the steep slope critical area, buffer, and structure setback to construct a single-family residence and described appurtenances. LUC 20.25H.125 allows for the modification of a critical area and critical area buffer through a critical areas report. The critical areas report is a mechanism by which certain LUC requirements may be modified for a specific proposal.

The critical areas report is intended to provide flexibility for sites where the expected critical areas functions and values are not present due to degraded conditions. The steep slope critical area and buffer on the property are degraded in function and value because they lack the vegetative structural diversity found in higher-quality steep slope critical areas. Therefore, the steep slope critical area and buffer are currently not fully performing their water quality, erosion control and wildlife habitat functions.

# II. Site Description, Zoning, Land Use, Shoreline Designation and Critical Areas

### A. Site Description

The subject parcel is 11,151 square feet in size and has access to the Lake Sammamish shoreline along the eastern property boundary. The parcel was developed with a 960 square-foot single-family residence, detached garage, and driveway with connection to West Lake Sammamish Pkwy SE in 1928. A steep slope critical area with an east-facing aspect exists in the middle of the property and continues off-site to the adjacent parcels to the north and south. Floodplain associated to Lake Sammamish is also found in the eastern portion of the site. Some native vegetation, including western redcedar (*Thuja plicata*), Douglas-fir (*Pseudotsuga menziesii*), salal (*Gaultheria shallon*), be7aked hazelnut (*Corylus cornuta*), tall Oregon grape (*Mahonia aquifolium*), sword fern (*Polystichum munitum*), and bracken fern (*Pteridium aquilinum*) can be found on-site but are mostly located adjacent to the property boundaries. Himalayan blackberry (*Rubus armeniacus*), English ivy (*Hedera helix*), and non-native holy (*Ilex spp.*) inhabit patches of the steep slope and steep slope buffer. See Figure 2 for more information.

Figure 2

# **B.** Zoning

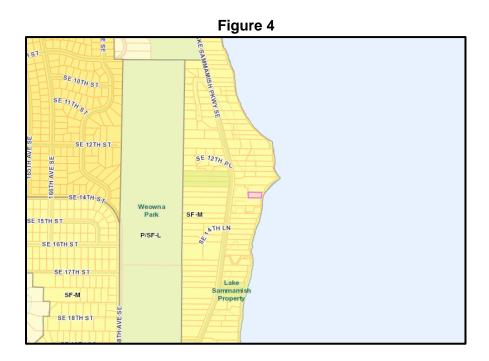
The property is zoned R-3.5, single-family residential. See Figure 3 for a zoning map.



Figure 3

# C. Land Use Context

The site has a Comprehensive Plan Land Use Designation of SF-M (Single-Family Medium Density). The site is bounded to the north, south, and west by single-family residential development, and to the east by Lake Sammamish. See Figure 4 for Comprehensive Plan Map.



# D. Shoreline Environment Designation

The site is located in the Shoreline Residential environment. Per LUC 20.25E the purpose of the shoreline residential environment is to accommodate single or multifamily residential development and appurtenant structures. A shoreline residential environment designation is assigned to Bellevue shorelands which are predominantly characterized by residential development or are planned for residential development and exhibit moderate to low levels of ecological functions because of historic shoreline modification activities. See Figure 5 for shoreline designation map.

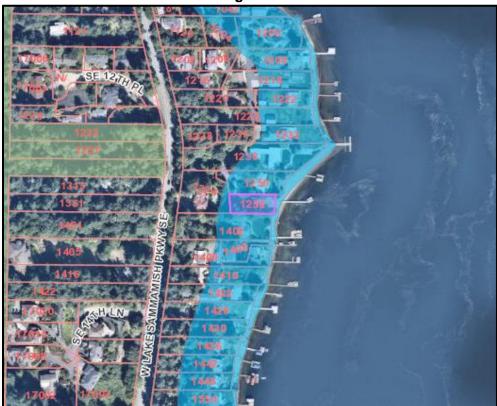


Figure 5

#### E. Critical Areas Functions and Values

### i. Geologic Hazard Areas

Geologic hazards pose a threat to the health and safety of citizens when commercial, residential, or industrial development is inappropriately sited in areas of significant hazard. Some geologic hazards can be reduced or mitigated by engineering, design, or modified construction practices. When technology cannot reduce risks to acceptable levels, building in geologically hazardous areas is best avoided (WAC 365-190).

Steep slopes may serve several other functions and possess other values for the City and its residents. Several of Bellevue's remaining large blocks of forest are located in steep slope areas, providing habitat for a variety of wildlife species and important linkages between habitat areas in the City. These steep slope areas also act as conduits

for groundwater, which drains from hillsides to provides a water source for the City's wetlands and stream systems. Vegetated steep slopes also provide a visual amenity in the City, providing a "green" backdrop for urbanized areas enhancing property values and buffering urban development.

# ii. Floodplains

The value of floodplains can be described in terms of both the hydrologic and ecological functions that they provide. Flooding of occurs when either runoff exceeds the capacity of rivers and streams to convey water within their banks, or when engineered stormwater systems become overwhelmed. Studies have linked urbanization with increased peak discharge and channel degradation (Dunne and Leopold 1978; Booth and Jackson 1997; Konrad 2000). Floodplains diminish the effects of urbanization by temporarily storing water and mediating flow to downstream reaches. The capacity of a floodplain to buffer upstream fluctuations in discharge may vary according to valley confinement, gradient, local relief, and flow resistance provided by vegetation. Development within the floodplain can dramatically affect the storage capacity of a floodplain, impact the hydrologic regime of a basin and present a risk to public health and safety and to property and infrastructure.

### iii. Habitat Associated with Species of Local Importance

The increase in human settlement density and associated intensification of land use known as urbanization has a profound and lasting effect on the natural environment and wildlife habitat (McKinney 2002, Blair 2004, Marzluff 2005, Munns 2006), is a major cause of native species local extinctions (Czech et al 2000), and is likely to become the primary cause of extinctions in the coming century (Marzluff et al. 2001a). Cities are typically located along rivers, on coastlines, or near large bodies of water. The associated floodplains and riparian systems make up a relatively small percentage of land cover in the western United States, yet they provide habitat for rich wildlife communities (Knopf et al. 1988), which in turn provide a source for urban habitat patches or reserves. Consequently, urban areas can support rich wildlife communities. In fact, species richness peaks for some groups, including songbirds, at an intermediate level of development (Blair 1999, Marzluff 2005). Protected wild areas alone cannot be depended on to conserve wildlife species. Impacts from catastrophic events, environmental changes, and evolutionary processes (genetic drift, inbreeding, colonization) can be magnified when a taxonomic group or unit is confined to a specific area, and no one area or group of areas is likely to support the biological processes necessary to maintain biodiversity over a range of geographic scales (Shaughnessy and O'Neil 2001). As well, typological approaches to taxonomy or the use of indicators present the risk that evolutionary potential will be lost when depending on reserves for preservation (Rojas 2007). Urban habitat is a vital link in the process of wildlife conservation in the U.S.

Properties within the Shoreline and Critical Area Overlays are part of the city's shoreline master program and are classified as environmentally sensitive. The master program

recognizes the site as a shoreline residential environment subject to the provisions of the City's Shoreline Master Program as discussed below.

# III. Consistency with Land Use Code Requirements:

# A. Zoning District Dimensional Requirements:

The site is located in the R-3.5 zoning district. Development of a single-family residence is consistent with the allowed development of this zoning district. The plans submitted generally demonstrate conformance with zoning dimensional standards. As part of the Building Permit conformance with the dimensional standards will be confirmed at time of Building Permit review. See Section IX for condition of approval associated with LUC 20.20.010 compliance.

R-3.5	Allowed	Proposed	Complies			
Front Setback	20 feet*	15 feet	*LUC 20.25H.040.B Allows modification of front setback standard. Proposal does not qualify for this modification See condition of approval for setback.			
Rear Setback	25 feet	60 feet	Can comply			
Side Setback	5 feet	7.5 feet	Can comply			
Combined Side	15 feet	15 feet	Can comply			
Lot Coverage	35%	34.8%	Can comply			
Impervious Surface	50%	46.3%	Can comply			
Greenscape	50%	46.3%	Greenscape calculated based on front setback. Full width of 20 feet is applicable. See Section IX for condition of approval for greenscape.			

# **B.** Consistency with Shoreline Master Plan Requirements

Single-family development and necessary appurtenances within the shoreline overlay area are exempt from shoreline substantial development. No structure or hardscape improvements are proposed within the 50-foot structure setback/shoreline vegetation conservation area (SVCA) under this permit. Vegetation alteration and changes in cover within the (SVCA) are subject to no net loss analysis. Tree removal, hazard or

otherwise, with the SVCA is subject to the requirements of LUC 20.25E.065, including, but not limited to, mitigation and documentation. A separate shoreline exemption will be required for approval prior to approval of construction permitting. See Section IX for condition of approval associated with Shoreline Exemption Permit requirements.

# C. Consistency with Land Use Code Critical Areas Performance Standards:

The City of Bellevue Land Use Code Critical Area Overlay District (LUC 20.25H) establishes performance standards and procedures that apply to development on any site which contains in whole or in part any portion designated as critical area, critical area buffer, or structure setback from a critical area buffer. This site contains a steep slope with a 50-foot buffer and a 75-foot toe-of-slope structure setback. The project is subject to the following performance standards which are reviewed below.

### D. Consistency with Performance Standards for Steep Slopes 20.25H.125

Development within a landslide hazard, steep slope critical area, or the critical area buffers of such hazards shall incorporate the following additional performance standards in design of the development, as applicable. The requirement for long-term slope stability shall exclude designs that require regular and periodic maintenance to maintain their level of function.

# 1. Structures and Improvements shall minimize alterations to the natural contour of the slope, and foundations shall be tiered where possible to conform to existing topography;

The proposed single-family structure includes minimal alteration to the existing grade outside the footprint area and has been designed to utilize all areas of existing single-family improvements (structure, walkways, driveway, etc.) to minimize impacts to the slope and slope buffer. The foundation for the single-family residence has been designed in a stepped configuration to further minimize alteration.

# 2. Structures and improvements shall be located to preserve the most critical portion of the site and its natural landforms and vegetation;

Structures and improvements have been located over degraded portions of the steep slope critical area, buffer and structure setback to avoid impacts to the SVCA, shoreline structure setback, and 100-year floodplain. The configuration of the new single-family home and improvements minimizes the non-hazard tree removal to five (5) trees (1-9" Scots pine, 1-7" western redcedar, 2-11" Leyland cypress, 1-20" Alaska yellow cedar). See Section IX for condition of approval associated with non-hazardous tree removal.

# 3. The proposed development shall not result in great risk or a need for increased buffers on neighboring properties;

The geotechnical review of the project found the project, as designed, to have "no net increase in risk to critical areas or adjacent properties. Increased buffers are not warranted at this time." (attachment 4, pg. 5). See Section IX for conditions of approval associated with geotechnical documentation, inspections, and hold

harmless agreement required for construction permit approval.

4. The use of retaining walls that allow the maintenance of existing natural slope area is preferred over graded artificial slopes where graded slopes would result in increased disturbance as compared to use of retaining walls; Foundation walls have been proposed to retain existing contours or the steep slope outside of the footprint to the maximum extent possible.

5. Development shall be designated to minimize impervious surfaces within the critical area and critical area buffer.

Development has been organized such that more than 90% of the existing disturbance area will be utilized, this includes the original driveway area and existing home footprint.

- 6. Where change in grade outside the building footprint is necessary, the site retention system should be stepped and regarding should be designed to minimize topographic modification. On slopes in excess of 40 percent, grading for yard area may be disallowed where inconsistent with this criteria; Changes in grade outside of the foundation have been limited to access and maintenance around the single-family structure. No yard area is proposed within the steep slope or buffer. Temporary shoring is proposed on the north, south, and west sides of the structure, and areas affected by temporary shoring outside of the footprint will have grades restored.
- 7. Building foundation walls shall be utilized as retaining walls rather than rockeries or retaining structures built separately and away from the building wherever feasible. Freestanding retaining devices are only permitted when they cannot be designed as structural elements of the building foundations. Foundation walls have been utilized to the greatest extent in this design to provide greater safety and stability to the existing steep slope.
- 8. On slopes in excess of 40 percent, use of pole-type construction which conforms to the existing topography is required where feasible. If pole-type construction is not technically feasible, the structure must be tiered to conform to the existing topography and to minimize topographic modification; Geotechnical analysis has found "pole foundations are not feasible..." (attachment 4, pg. 6) and the site has been designed with a tiered foundation with geotechnical recommendations.
- On slopes in excess of 40 percent, piled deck support structures are required where technically feasible for parking or garages over fill-based construction types; and

The proposal utilizes a garage incorporated into the main structure and supported using recommended foundation walls. No fill-based construction is proposed.

# 10. Areas of new permanent disturbance and all areas of temporary disturbance shall be mitigated and/or restored pursuant to a mitigation and restoration plan meeting the requirements of LUC 20.25H.210.

A mitigation and restoration plan (attachment 2) containing 2,530 square feet of native planting and meeting the requirements of LUC 20.25H.210 has been submitted within this request. See Section IX for condition of approval associated with temporary restoration and mitigation plans required for construction permit approval.

# E. Consistency with Critical Areas Report LUC 20.25H.230

The applicant supplied a complete critical areas report (attachment 3, in file) prepared by Altmann Oliver Associates, LLC, a qualified professional. The report met the minimum requirements in LUC 20.25H.250.

## F. Consistency with Critical Areas Report LUC 20.25H.140 & 20.25H.145

Modification of a steep slope and steep slope buffer requires a critical areas report as part of the application for a Critical Area Land Use Permit. The applicant has obtained the services of a qualified geotechnical engineering company to study the site and document the observed conditions. Staff has reviewed the following documents:

Geotechnical Review and Additional Recommendations (June 22, 2020) prepared by Phil Haberman, PE, LG, LEG Principal (attachment 4, in file)

The geotechnical analysis documented existing site conditions and documents "...no evidence of severe erosion, exposed soils, hummocky terrain, or other signs of landslide activity." The geotechnical engineer also provided recommendations for foundation and foundation wall construction, seismic construction, and drainage. See Section IX for conditions of approval, and for information on requirements for geotechnical monitoring and hold harmless letter submittal.

# **IV. Public Notice and Comment**

Application Date: June 25, 2020
Public Notice (500 feet): July 30, 2020
Minimum Comment Period: August 13, 2020

The Notice of Application for this project was published in the City of Bellevue weekly permit bulletin on July 30, 2020. It was mailed to property owners within 500 feet of the project site. No comments have been received from the public as of the writing of this staff report.

# V. Summary of Technical Reviews

## **Clearing and Grading:**

The Clearing and Grading Division of the Development Services Department has reviewed the proposed development for compliance with Clearing and Grading codes and standards. The Clearing and Grading staff found no issues with the proposed development. A Building Permit with Clearing and Grading review is required, and the application must contain a letter from the project geotechnical engineer verifying the construction plans meet the recommendations contained within this report. The project will require geotechinical inspection and is subject to Clearing & Grading rainy season restrictions. See Section IX for conditions of approval associated with Building Permit requirements, inspection requirements, and rainy season restrictions.

#### **Utilities:**

The Utilities Division of the Development Services Department has reviewed the proposed development for compliance with Utilities codes and standards. The Utilities staff found no issues with the proposed development

# VI. State Environmental Policy Act (SEPA)

The proposal is exempt from SEPA review, per WAC 197-11-800 and BCC 22.01.032. Construction of a single-family residence, even when located in a critical area, is a categorical exemption.

### VII. Decision Criteria

# A. Critical Areas Report Decision Criteria-Proposals to Reduce Regulated Critical Area Buffer LUC 20.25H.255.

The Director may approve, or approve with modifications, a proposal to reduce the regulated critical area buffer on a site where the applicant demonstrates:

# 1. The proposal includes plans for restoration of degraded critical area or critical area buffer functions which demonstrate a net gain in overall critical area or critical area buffer functions;

**Finding:** The proposal includes plans for restoration of a degraded steep slope, steep slope buffer, steep slope structure setback, and floodplain areas currently containing an existing single-family residence, storage structure, and non-native, invasive vegetation with approximately 2,530 square feet of native vegetation. In addition to the permanent modifications to the critical areas, buffers and structure setbacks, mitigation for five (5) non-hazardous trees will be required. Restoration activities will result in overall net gain in critical area and critical area buffer functions by increasing slope stability and preventing erosion in the steep slope critical area and steep slope critical area buffer. The improvements will also provide future opportunity for habitat in steep slope, steep

slope buffer, floodplain, and shoreline vegetation conservation area (SVCA).

2. The proposal includes plans for restoration of degraded critical area or critical area buffer functions which demonstrate a net gain in the most important critical area or critical area buffer functions to the ecosystem in which they exist;

**Finding:** The proposed restoration plan will result in overall net gain in critical area and critical area buffer functions to the ecosystem by removing invasive species; increasing native species diversity; and improving native species habitat for the steep slope, steep slope buffer, floodplain, and SVCA.

3. The proposal includes a net gain in stormwater quality function by the critical area buffer or by elements of the development proposal outside of the reduced regulated critical area buffer;

**Finding:** The proposal includes approximately 2,530 square feet of native vegetation within the steep slope, steep slope buffer, steep slope structure setback, SVCA, and floodplain and will provide stormwater quality improvements of natural water drainage towards Lake Sammamish. This does not include approximately 1,000 square feet of native vegetation to be installed within the first 10 feet landward of the Lake Sammamish ordinary high water mark (OHWM) as part of the approved dock permit (19-124129-BR).

4. Adequate resources to ensure completion of any required restoration, mitigation and monitoring efforts;

**Finding:** This is a proposal to impact a steep slope critical area and to reduce a steep slope buffer and structure setback. The applicant is proposing mitigation proportional to the anticipated impact and has included a mitigation and restoration plan with the proposal. To ensure installation and appropriate maintenance of the proposed and required mitigation the applicant is required to submit a financial security device meeting the requirements of LUC 20.40.490. Mitigation measures must be installed before occupancy is granted and maintenance of required plantings is required for a period of five years. See Section IX for condition of approval associated with assurance device requirements.

5. The modifications and performance standards included in the proposal are not detrimental to the functions and values of critical area and critical area buffers off-site; and

**Finding:** The proposed single-family residence has been designed to utilize more than 90% of the existing single-family improvements. The requested modification of approximately 1,912 square feet (not including exempted footprint of existing primary structure) has been mitigated by restoring the degraded steep slope, steep slope buffer, steep slope structure setback, floodplain and SVCA on-site with approximately 2,530 square feet of native trees, shrubs, and groundcovers, including tree mitigation for

proposed removal of five (5) non-hazardous trees. Installation of native vegetation will rehabilitate the degraded conditions of the steep slope, steep slope buffer, and floodplain and SVCA, and assist in mitigating stormwater runoff created by this project.

6. The resulting development is compatible with other uses and development in the same land use district.

**Finding:** The proposal to construct a new single-family residence maintains consistency with the surrounding residential land use district.

#### B. Critical Areas Land Use Permit Decision Criteria 20.30P

The Director may approve or approve with modifications an application for a critical areas land use permit if:

1. The proposal obtains all other permits required by the Land Use Code;

**Finding:** The applicant must obtain required development permits. A construction permit is required. See Section IX for condition of approval associated with required permitting.

2. The proposal utilizes to the maximum extent possible the best available construction, design and development techniques which result in the least impact on the critical area and critical area buffer;

**Finding:** The single-family residential structure, foundation wall, and native landscaping utilize the best available construction, design, and development techniques. Degraded steep slope, steep slope buffer, steep slope structure setback, floodplain, and SVCA conditions have been documented, and will be addressed through the mitigation and restoration landscaping to increase the level of function of the steep slope critical area, steep slope buffer, and floodplain.

3. The proposal incorporates the performance standards of Part 20.25H to the maximum extent applicable, and ;

**Finding:** As discussed in Section III of this report, the applicable performance standards of LUC Section 20.25H are being met.

4. The proposal will be served by adequate public facilities including street, fire protection, and utilities; and;

**Finding:** The proposed activity will not impact public facilities and adequate services are available to serve the proposed project.

# 5. The proposal includes a mitigation or restoration plan consistent with the requirements of LUC Section 20.25H.210; and

**Finding:** The proposal seeks modification for the steep slope, steep slope buffer, and steep slope structure setback to facilitate construction of a single-family residential structure. Included with this proposal is a mitigation plan which provides approximately 2,530 square feet of native plantings to restore a degraded steep slope, steep slope buffer, floodplain, SVCA, and non-hazardous trees proposed for removal. The applicant is required to follow the recommendation included in the project geotechnical report, which shall be verified by an inspection made by a qualified engineer. See Section IX for conditions of approval associated with temporary restoration and mitigation plan requirements.

### 6. The proposal complies with other applicable requirements of this code.

**Finding:** As discussed in Section III and V of this report, the proposal complies with all other applicable requirements of the Land Use Code.

### VIII. Conclusion and Decision

After conducting the various administrative reviews associated with this proposal, including Land Use Code consistency, SEPA, City Code and Standard compliance reviews, the Director of the Development Services Department does hereby **approve with conditions** the proposal to modify the steep slope critical area, steep slope buffer, and steep slope structure setback at 1258 W Lake Sammamish Pkwy SE.

**Note- Expiration of Approval:** In accordance with LUC 20.30P.150 a Critical Areas Land Use Permit automatically expires and is void if the applicant fails to file for a Clearing and Grading Permit, Building Permit, or other necessary development permits within one year of the effective date of the approval.

# IX. Conditions of Approval

The applicant shall comply with all applicable Bellevue City Codes and Ordinances including but not limited to:

Applicable Ordinances	Contact Person
Clearing and Grading Code - BCC 23.76	Savina Uzunow, 425-452-7860
Utilities Code - BCC 24	Jason Felgar, 425-452-7851
Land Use Code - BCC 20.25H	David Wong, 425-452-4282

The following conditions are imposed under the Bellevue City Code or SEPA authority referenced:

1. Building Permit: Approval of this Critical Areas Land Use Permit does not constitute an approval of a development permit. A Building Permit for the single-family residential structure and appurtenances is required. All dimensional standards will be confirmed at the time of building permit review. Building Permit must include Clearing and Grading review.

Authority: Land Use Code 20.30P.140
Reviewer: David Wong, Land Use

2. Shoreline Exemption: Approval of this Critical Areas Land Use Permit does not constitute an approval of a Shoreline permit. A Shoreline Exemption for the single-family residential structure and appurtenances is required. Issuance of a Shoreline Exemption must occur at the same time or prior to Building Permit approval and the application shall include designs compliant with the required standards in LUC 20.25E.065 and other applicable codes and policies within the city's Shoreline Master Program.

Authority: Land Use Code 20.25E.170 Reviewer: David Wong, Land Use

**3. Approved Modifications:** The steep slope critical area, steep slope buffer, and steep slope structure setback modifications approved are for the construction of the single-family residential structure only as depicted in the project site plan (Attachment 1), and does not authorize additional site changes outside of this project scope. The modifications do not allow future structures or improvements to be located in the critical areas, buffers, or structure setbacks without approval of a Critical Areas Land Use Permit and geotechnical evaluation.

Authority: Land Use Code 20.30P.140 Reviewer: David Wong, Land Use

**4. Front Yard Setback and Greenscape:** The front yard setback applied shall be the full 20 feet as required by LUC 20.20.010 for properties zoned R-3.5. The project shall provide at least 50% greenspace based on the front setback area. Conformance with these requirements is required for Building Permit approval.

Authority: Land Use Code 20.20.010, 20.25H.040

Reviewer: David Wong, Land Use

**5. Geotechnical Recommendations:** The project shall be constructed per the recommended procedures and practices in the geotechnical report dated June 22, 2020. A letter of record from the geotechnical engineer shall be provided prior to issuance of the Building Permit verifying the construction plans are in conformance with the recommendations provided in the above geotechnical report.

Authority: Land Use Code 20.30P.140, Clearing & Grading Code 23.76.050 Reviewer: David Wong, Land Use; Savina Uzunow, Clearing & Grading

**6. Mitigation and Restoration Planting:** Plans submitted for the building permit must provide 2,530 square feet of restoration planting that adheres to the minimum standards found in the City of Bellevue's Critical Areas Handbook. In addition, five (5) native trees shall be planted as mitigation of five (5) non-hazard trees within the steep slope or the buffers associated with the slope.

Authority: Land Use Code, 20.30P.140 Reviewer: David Wong, Land Use

**7. Rainy Season restrictions:** Due to the proximity to steep slope critical area and Lake Sammamish, no clearing and grading activity may occur during the rainy season, which is defined as October 1 through April 30 without written authorization of the Development Services Department. Should approval be granted for work during the rainy season, increased erosion and sedimentation measures, representing the best available technology must be implemented prior to beginning or resuming site work.

Authority: Bellevue City Code 23.76.093.A,
Reviewer: Savina Uzunow, Clearing and Grading

**8. Maintenance and Monitoring:** The mitigation and restoration areas shall be maintained and monitored for five (5) years. Annual monitoring reports are to be submitted to Land Use each of the five years at the end of each growing season or December 31st. Photos from selected points, determined by the City during the preconstruction inspection, will be included in the monitoring reports to document the planting. The following schedule and performance standards apply and are evaluated in the report each year:

Year 1 (from date of plant installation)

100% survival of all install plants or replanting in following dormant season to reestablish 100%

15% minimum woody vegetative coverage

10% maximum coverage of invasive plants in planting area

Year 2 (from date of plant installation)

85% survival of all install plants and 100% of all trees or replanting in the following dormant season to reestablish 100%

20% minimum woody vegetative coverage

10% maximum coverage of invasive plants in planting area

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Year 3-5 (from date of plant installation)

85% survival of all install plants and 100% of all trees or replanting in the following dormant season to reestablish 100%

25% (yr. 3) and 40% (yr. 5) minimum woody vegetative coverage

10% maximum coverage of invasive plants in planting area

The reports along with a copy of the planting plan can be sent to David Wong at dwong@bellevuewa.gov or to the address below:

Environmental Planning Manager Development Services Department City of Bellevue PO Box 90012 Bellevue, WA 98009-9012

Authority: Land Use Code 20.30P.140; 20.25H.220

Reviewer: David Wong, Land Use

**9. Planting Cost Estimate:** A cost estimate for the proposed mitigation and restoration plant installation must be submitted prior to Building Permit issuance.

Authority: Land Use Code 20.30P.160 Reviewer: David Wong, Land Use

**10. Maintenance Surety:** A maintenance surety, based on the cost estimate above is required and shall equal 20 percent of the cost of the plants, materials, and installation, or 100% of the cost of maintenance contract. The maintenance surety is required prior to Building Permit issuance.

Authority: Land Use Code 20.30P.140 Reviewer: David Wong, Land Use

11. Hold Harmless Agreement: The applicant shall submit a hold harmless agreement in a form approved by the City Attorney which releases the City from liability for any damage arising from the location of improvements within a critical area, critical area buffer, and critical area structure setback in accordance with LUC 20.30P.170. The hold harmless agreement is required to be recorded with King County prior to clearing and grading permit issuance. Staff will provide the applicant with the hold harmless form.

Authority: Land Use Code 20.30P.170 Reviewer: David Wong, Land Use

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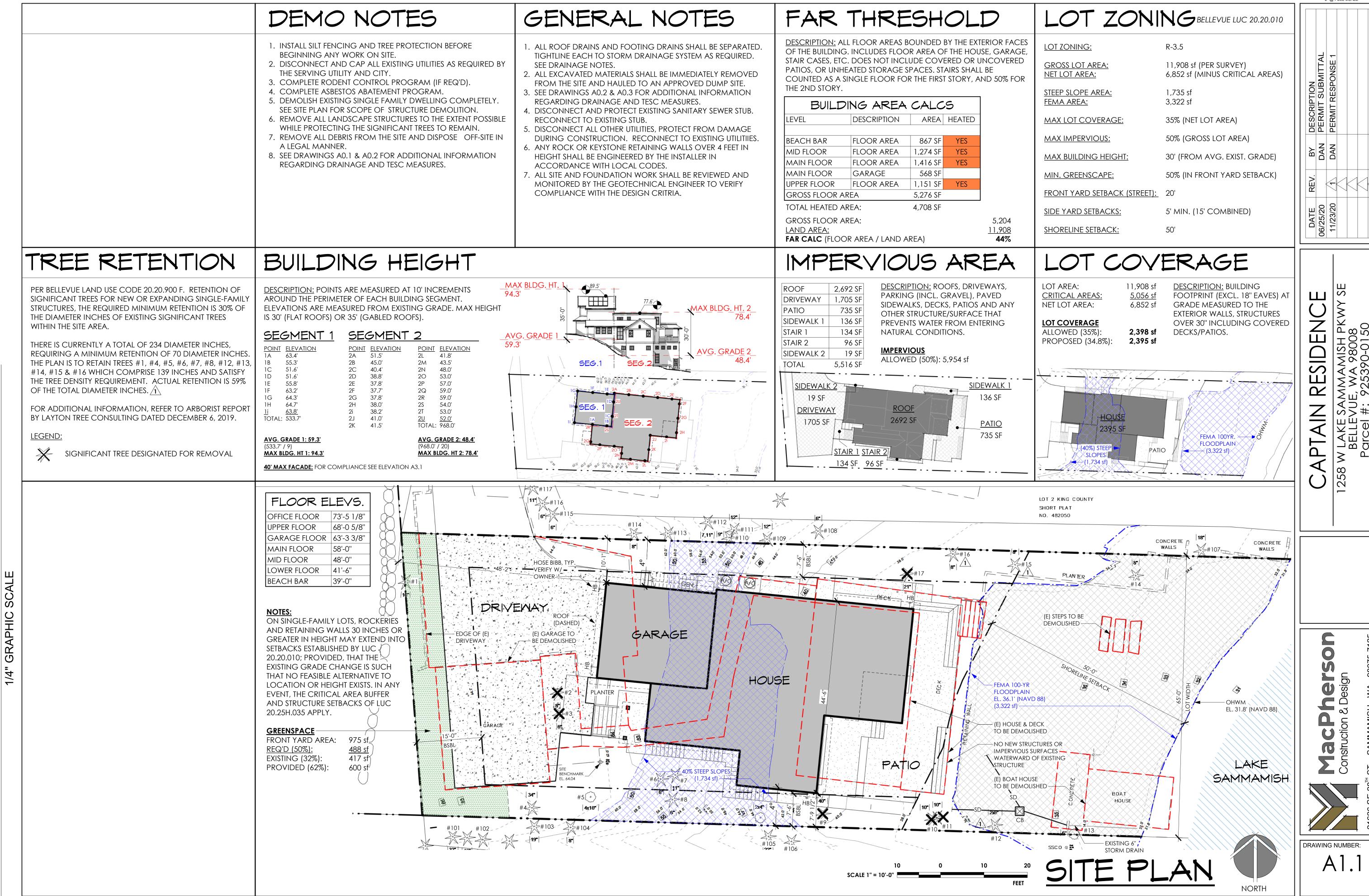
**12. Clearing Limits and Temporary Erosion & Sedimentation Control:** Prior to the initiation of any clearing or grading activities, clearing limits and the location of all temporary erosion and sedimentation control measure shall be field staked for approval by the on-site clearing and grading inspector.

Authority: Clearing & Grading Code 23.76.060 & 23.76.090

Reviewer: Savina Uzunow, Clearing & Grading

**13. Geotechnical Monitoring and Inspection:** The project geotechnical engineer of record or his representative must be on site during critical earthwork operations. The geotechnical engineer must monitor and test soil cuts and fills, subgrades for footings and retaining walls, utility trench backfill, and any unusual seepage, slope, or subgrade conditions.

Authority: Clearing & Grading Code 23.76.050 Reviewer: Savina Uzunow, Clearing & Grading



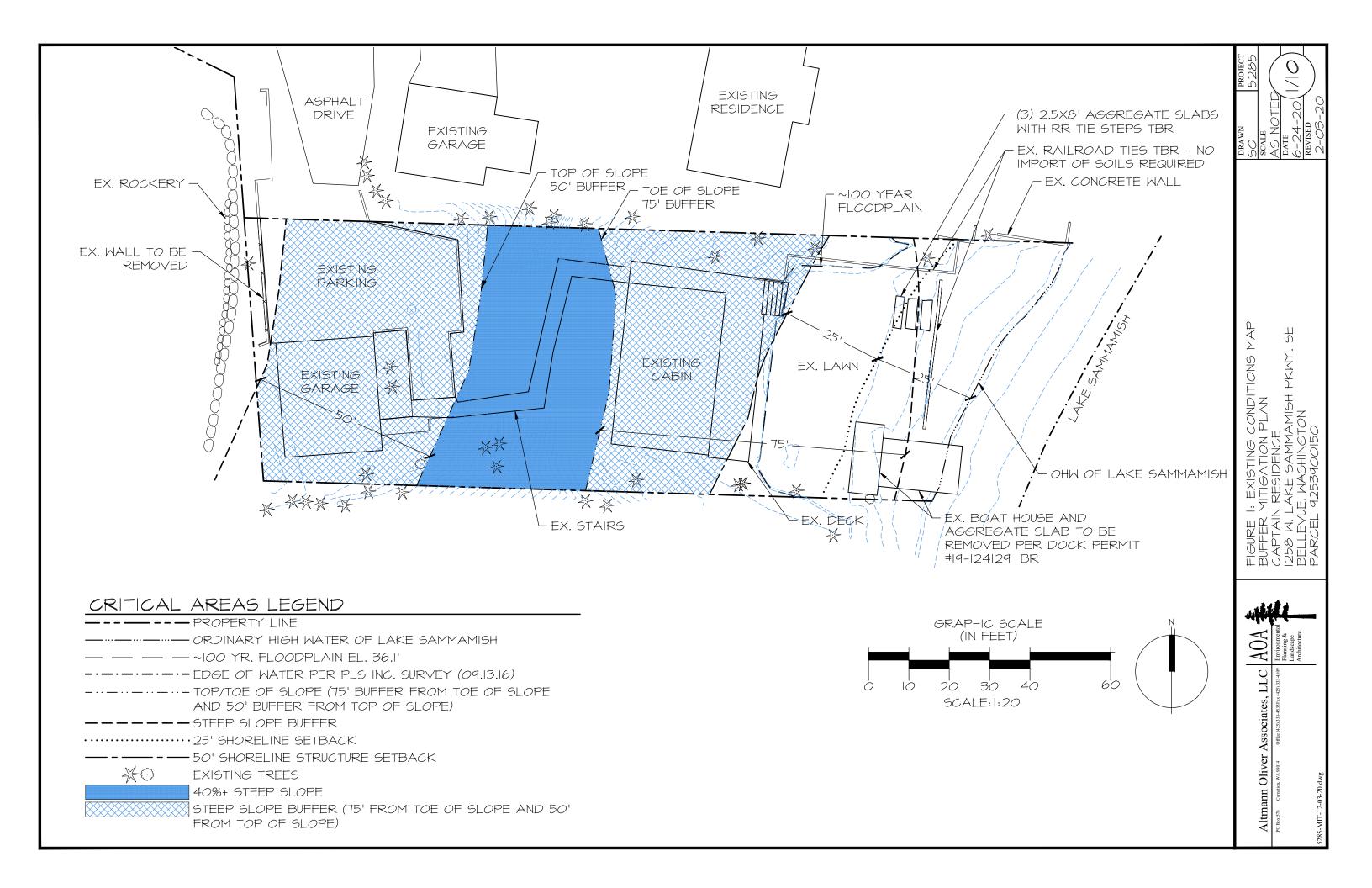
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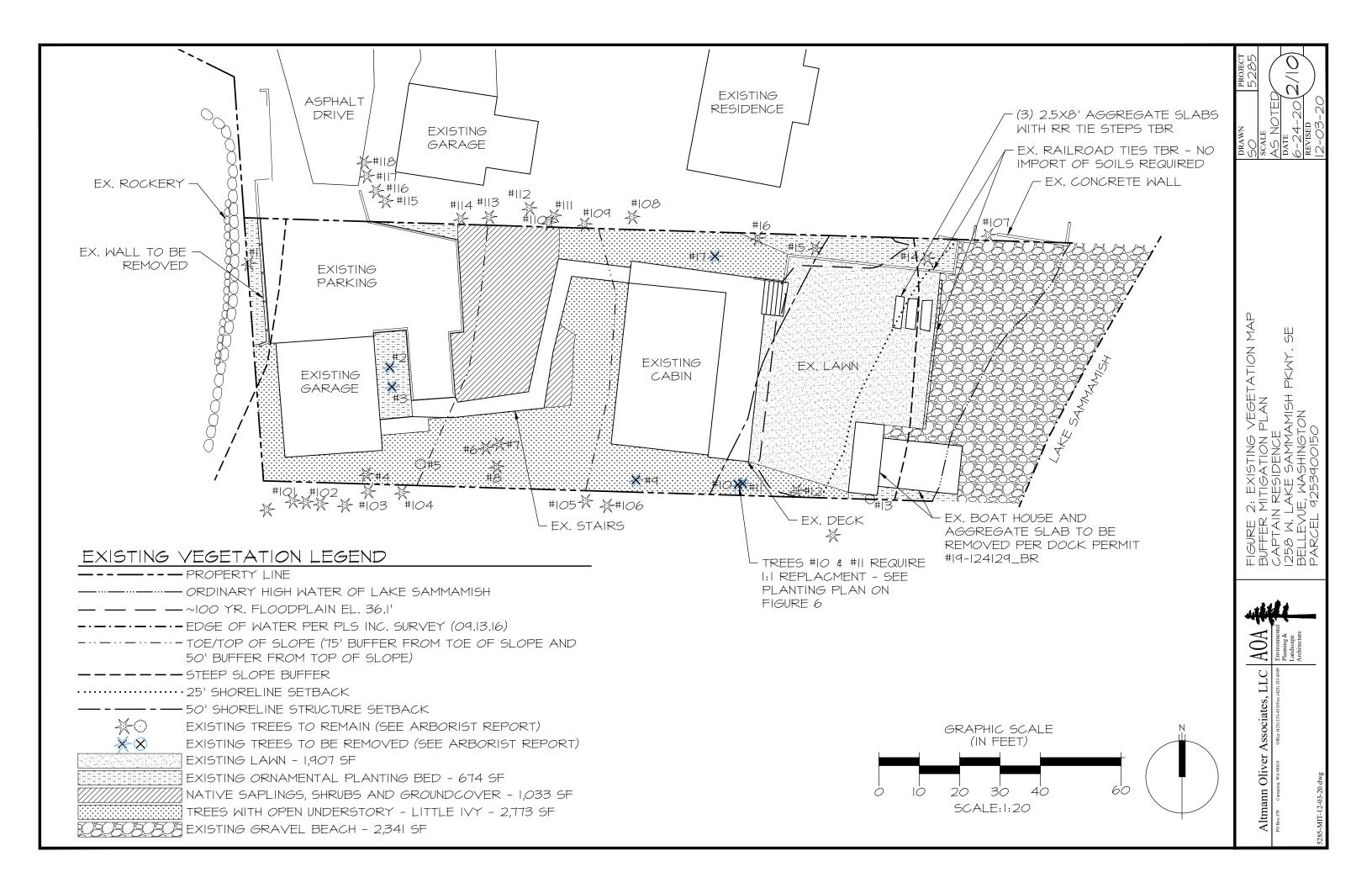
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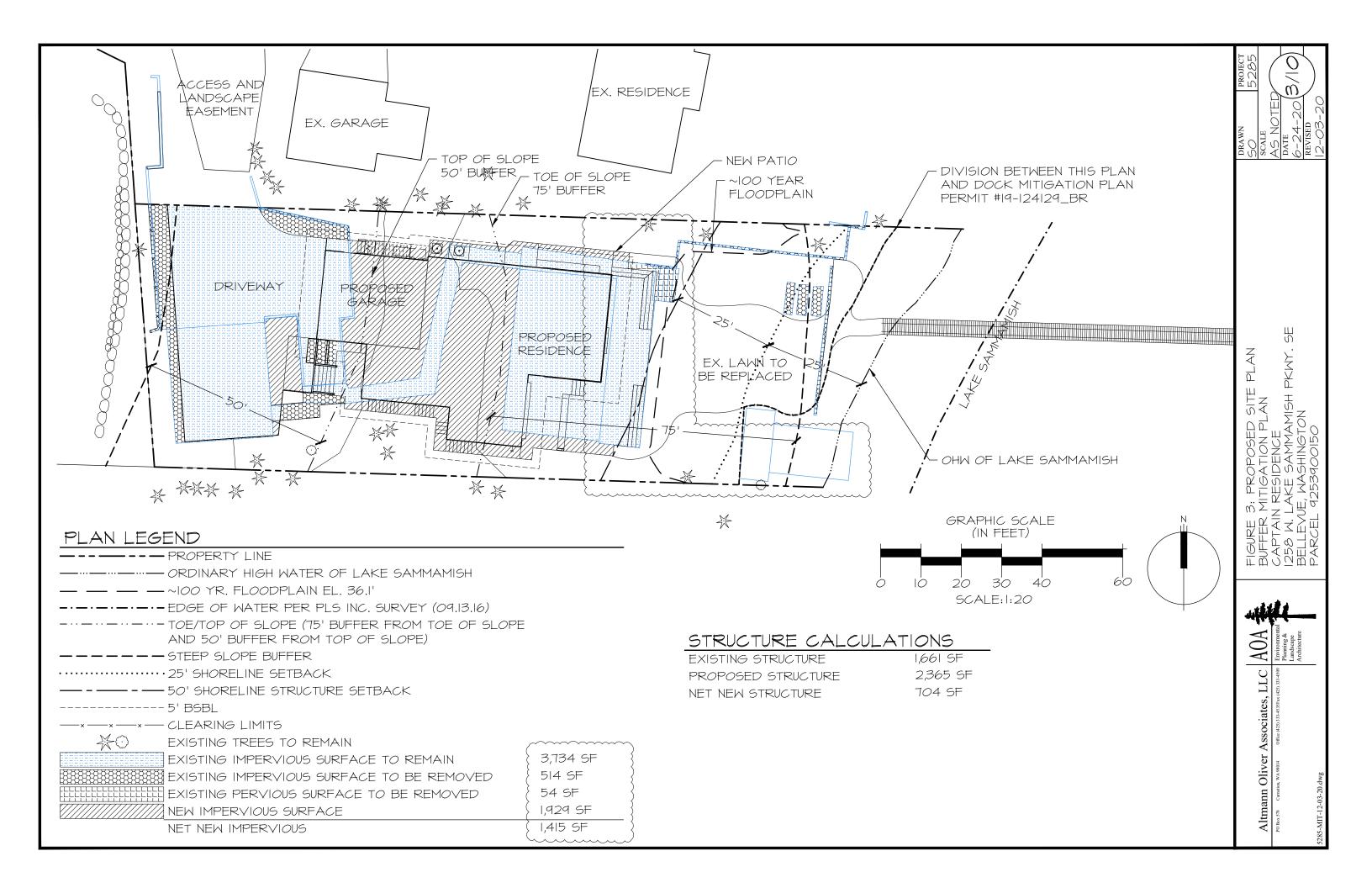
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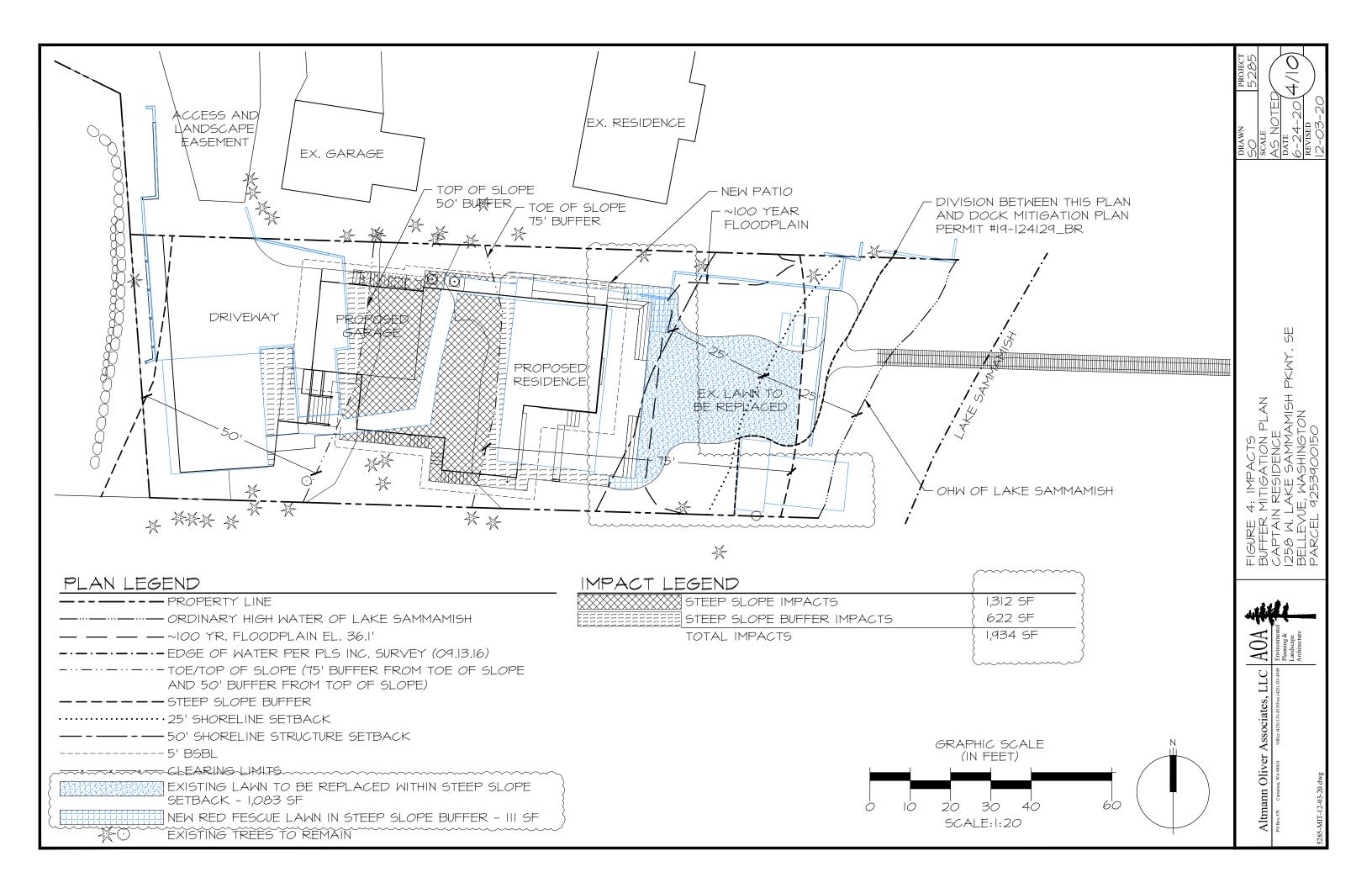
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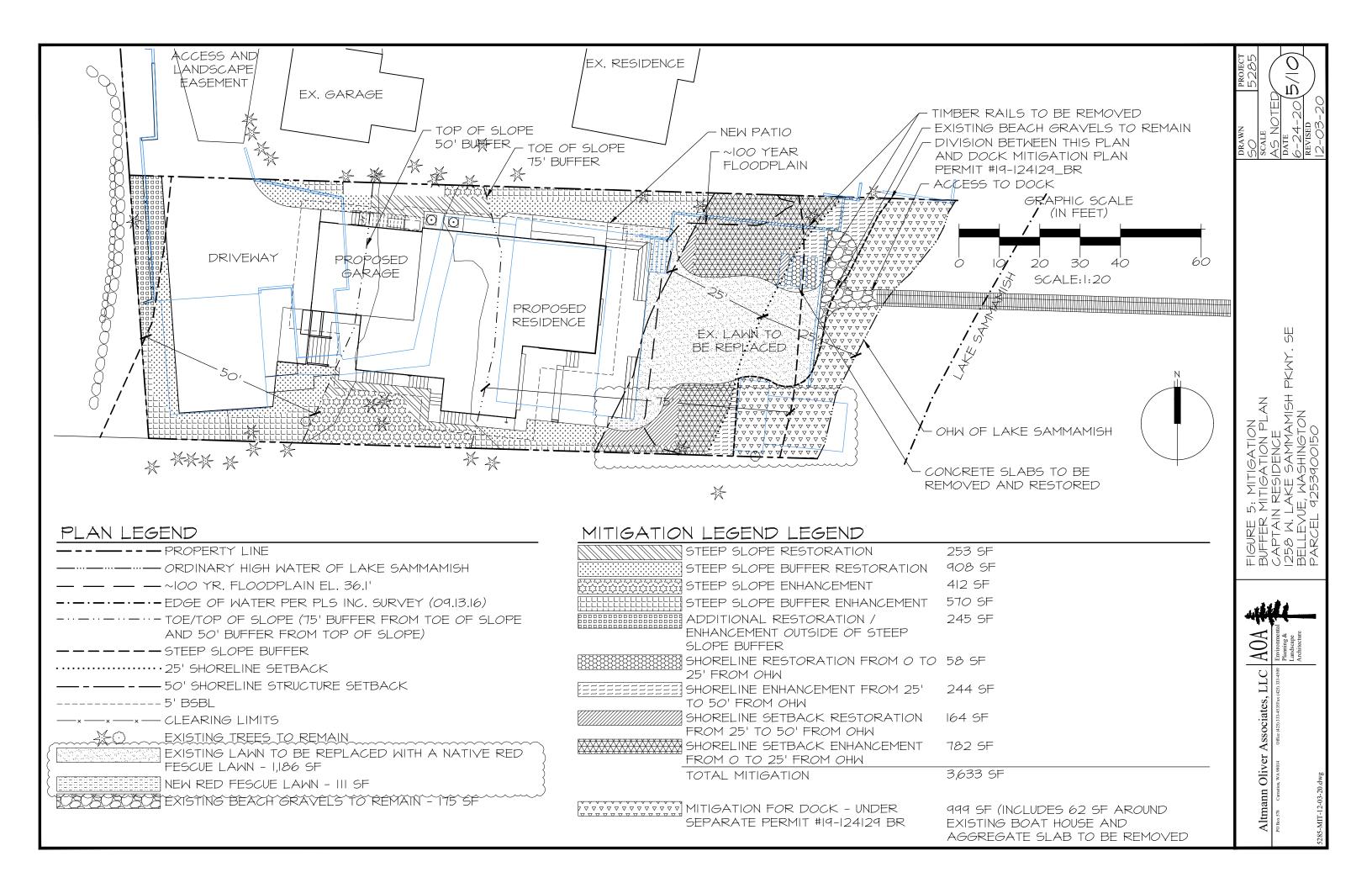
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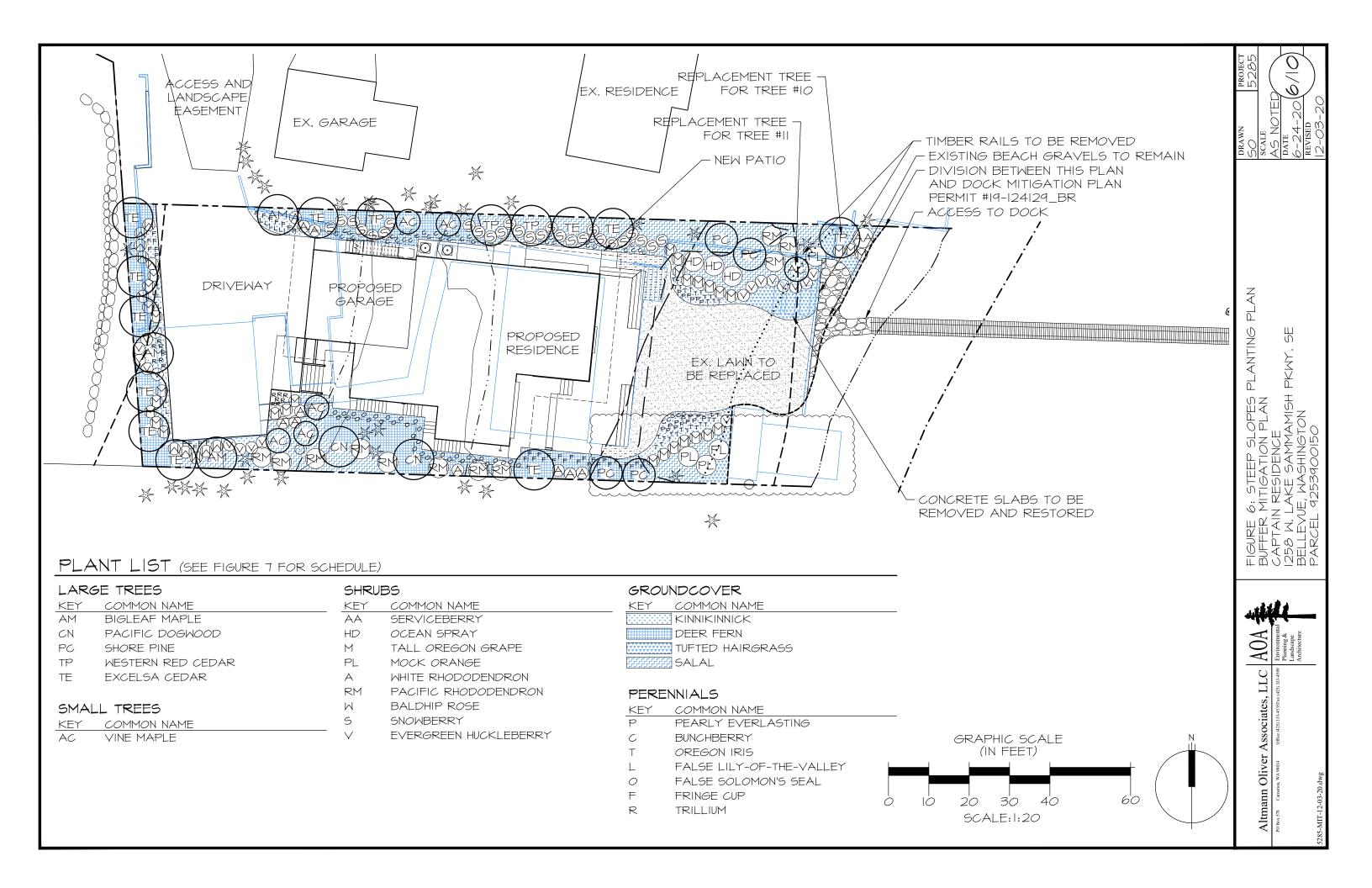










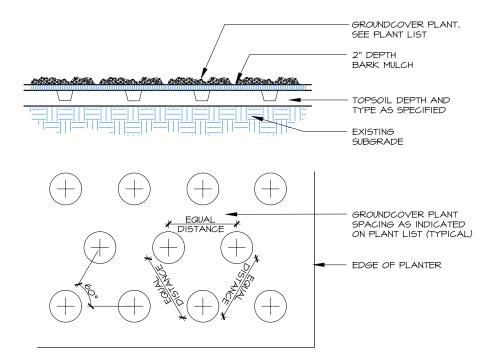


_AR	SE TREES								
(EY	SCIENTIFIC NAME	COMMON NAME	SPACING	QTY.	SIZE (MIN.)	NOTES			
·Μ	ACER MACROPHYLLUM	BIGLEAF MAPLE	10' 0.C.	3	5 <i>G</i> AL.	SINGLE TRUNK, WELL BRANCHED			
N	CORNUS NUTTALII	PACIFIC DOGWOOD	10' 0.C.	2	5 <i>G</i> AL.	SINGLE TRUNK, WELL BRANCHED			
$^{\circ}C$	PINUS CONTORTA	SHORE PINE	8' O.C.	4	5 <i>G</i> AL.	FULL & BUSHY			
P	THUJA PLICATA	WESTERN RED CEDAR	10' 0.C.	4	5 <i>G</i> AL.	FULL & BUSHY			
E	THUJA PLICATA 'EXCELSA'	EXCELSA CEDAR	10' O.C.	10	5 GAL.	FULL & BUSHY			
MA.	LL TREES								
EY	SCIENTIFIC NAME COMMON NAME		SPACING	QTY.	SIZE (MIN.)	NOTES			
4C	ACER CIRCINATUM	VINE MAPLE	6' O.C.	5/I	5 <i>G</i> AL./2" CAL., B&B	MULTI-STEM (3 MIN.)			
HRL	JBS								
(EY	SCIENTIFIC NAME	COMMON NAME	SPACING	QTY.	SIZE (MIN.)	NOTES			
λA	AMELANCHIER ALNIFOLIA	SERVICEBERRY	5' O.C.	1	2 <i>G</i> AL.	MULTI-STEM (3 MIN.)			
D	HOLODISCUS DISCOLOR	OCEAN SPRAY	5' O.C.	3	2 <i>G</i> AL.	MULTI-STEM (3 MIN.)			
1	MAHONIA AQUIFOLIUM	TALL OREGON GRAPE	3' O.C.	31	2 <i>G</i> AL.	FULL & BUSHY			
L	PHILADELPHUS LEWISII	MOCK ORANGE	5' O.C.	4	2 <i>G</i> AL.	MULTI-STEM (3 MIN.)			
	RHODODENDRON ALBIFLORUM	WHITE RHODODENDRON	3' O.C.	10	2 GAL.	FULL & BUSHY			
M.	RHODODENDRON MACROPHYLLUM	PACIFIC RHODODENDRON	5' O.C.	П	2 GAL.	FULL & BUSHY			
ļ	ROSA GYMNOCARPA	BALDHIP ROSE	3' O.C.	10	I GAL.	MULTI-STEM (3 MIN.)			
)	SYMPHORICARPOS ALBUS	SNOWBERRY	3' O.C.	27	2 GAL.	MULTI-STEM (3 MIN.)			
•	VACCINIUM OVATUM	EVERGREEN HUCKLEBERRY	2' O.C.	19	2 GAL.	FULL & BUSHY			
RO	UNDCOVER								
(EY	SCIENTIFIC NAME	COMMON NAME	SPACING	QTY.	SIZE (MIN.)	NOTES			
	☑ ARCTOSTAPHYLOS UVA-URSI	KINNIKINNICK	2' O.C.	98	I GAL.	FULL & BUSHY			
	BLECHNUM SPICANT	DEER FERN	2' O.C.	256	I GAL.	FULL & BUSHY			
V V V V V V V	☑ DESCHAMPIA CESPITOSA	TUFTED HAIRGRASS	2' O.C.	60	I GAL.	FULL & BUSHY			
	GAULTHERIA SHALLON	SALAL	2' <i>O.C.</i>	246	I GAL.	FULL & BUSHY			
'ERE	ENNIALS								
ΈΥ	SCIENTIFIC NAME	COMMON NAME	SPACING	QTY.	SIZE MIN.)	NOTES			
	ANAPHALIS MARGARITACEA	PEARLY EVERLASTING	l' O.C.	18	I GAL. OR 4" POT	FULL & BUSHY			
	CORNUS CANADENSIS	BUNCHBERRY	9" O.C.	39	I GAL. OR 4" POT	FULL & BUSHY			
	IRIS TENAX	OREGON IRIS	l' O.C.	30	I GAL. OR 4" POT	FULL & BUSHY			
	MAIANTHEMUM DILATATUM	FALSE LILY-OF-THE-VALLEY	l' O.C.	16	I GAL. OR 4" POT	FULL & BUSHY			
	MAIANTHEMUM RACEMOSUM	FALSE SOLOMON'S SEAL	l' O.C.	34	I GAL. OR 4" POT	FULL & BUSHY			
	TELLIMA GRANDIFLORA	FRINGE CUP	l' O.C.	42	I GAL. OR 4" POT	FULL & BUSHY			
2	TRILLIUM	TRILLIUM	l' O.C.	14	I GAL. OR 4" POT	FULL & BUSHY			

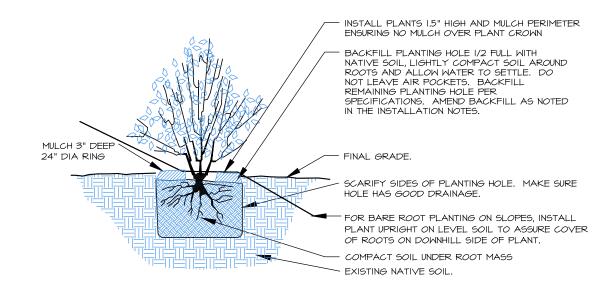
FIGURE 7: PLANT SCHEDULE
BUFFER MITIGATION PLAN
CAPTAIN RESIDENCE
1258 M. LAKE SAMMAMISH PKMY. SE
BELLEVUE, WASHINGTON
PARCEL 9253900150 Altmann Oliver Associates, LLC AOA FORT COMMING, WA 98014 Office (425) 333-4535 Fox (425) 333-4509 Flaming & Flaming & Landscape Landscape Architecture

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# CONTAINER TREE/SHRUB PLANTING (TYP.) SCALE: NTS



(3) GROUNDCOVER PLANTING (TYP.)
SCALE: NTS



# 2 BARE-ROOT SHRUB PLANTING (TYP.) SCALE: NTS

# SHORELINE CODE

NOTE

CALCULATIONS FOR SHORELINE TYPES AND VALUES PER LUC 20.25E.065.F.8.d:

EXISTING:

IMPERVIOUS: 145 SF X 0.00 = 0.00

LAWN: 1809 SF X 0.10 = 180.90

BARE GROUND OR PERVIOUS: 899 SF X 0.15 = 134.85

NON-NATIVE VEGETATION 25-50' FROM OHWM: 203 SF X 0.25 = 50.75

NON-NATIVE VEGETATION 0-25' FROM OHWM: 47 SF X 0.30 = 14.10

NATIVE VEGETATION 25-50' FROM OHWM: 179 SF X 0.60 = 107.40

NATIVE VEGETATION 0-25' FROM OHWM: 38 SF X 0.80 = 30.40

NATIVE OVERHANGING VEGETATION O-10' FROM OHMM PER DOCK PERMIT: 631 SF X 1.00 =

631.00

TOTAL: 1,148.40

PROPOSED:

IMPERVIOUS: 0 SF X 0.00 = 0.00

LAWN: 1,158 SF X O.10 = 115.80

BARE GROUND OR PERVIOUS: 184 SF X 0.15 = 27.60

NATIVE VEGETATION 25-50' FROM OHWM: 848 SF X 0.60 = 508.80

NATIVE VEGETATION 0-25' FROM OHWM: 658 SF X 0.80 = 526.40

TOTAL: 1,178.60

PROPOSED > EXISTING 1,178.60 1,148.40

FIGURE 8: PLANTING DETAILS & SHORELINE BUFFER MITIGATION PLAN CAPTAIN RESIDENCE 1258 M. LAKE SAMMAMISH PKMY. SE BELLEVUE, WASHINGTON PARCEL 9253900150

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- I. THIS PLAN PERTAINS TO PLANTING PORTION OF THE SITE WORK ONLY.
- 2. CONTRACTOR INFORMATION. WHEN IT IS AVAILABLE, CONTACT INFORMATION SHALL BE PROVIDED TO THE CITY OF BELLEVUE THAT INCLUDES NAMES, ADDRESSES AND PHONE NUMBERS OF PERSONS/FIRMS THAT WILL BE RESPONSIBLE FOR INSTALLING REQUIRED PLANTS AND PERFORMING REQUIRED MAINTENANCE.
- 3. CONTRACTOR'S QUALIFICATIONS. ALL WORK SHALL BE PERFORMED BY A LICENSED LANDSCAPE CONTRACTOR REGISTERED IN THE STATE OF WASHINGTON. CONTRACTOR MUST BE EXPERIENCED IN MITIGATION AND RESTORATION WORK. THE CONTRACTOR SHALL PROVIDE THAT THERE IS ONE PERSON ON THE SITE AT ALL TIMES DURING WORK AND INSTALLATION WHO IS THOROUGHLY FAMILIAR WITH THE TYPE OF MATERIALS BEING INSTALLED AND THE BEST METHODS FOR THEIR INSTALLATION, AND WHO SHALL DIRECT ALL WORK BEING PERFORMED UNDER THESE SPECIFICATIONS. THIS PERSON SHALL HAVE A MINIMUM OF FIVE (5) YEARS EXPERIENCE INSTALLING NATIVE PLANT MATERIALS FOR WETLAND MITIGATION OR RESTORATION PROJECTS, UNLESS OTHERWISE ALLOWED BY THE LANDSCAPE DESIGNER, WETLAND BIOLOGIST AND/OR THE CITY OF BELLEYUE.
- 4. EXISTING STRUCTURES AND NON-NATURAL MATERIALS SHALL BE REMOVED FROM ALL MITIGATION AND LANDSCAPED AREAS PRIOR TO PLANTING.
- 5. ALL PLANTING AREAS OUTSIDE THE 100-YEAR FLOODPLAIN SHALL BE OVER-EXCAVATED 12" FOR PLACEMENT OF 12" OF IMPORTED 3-WAY TOPSOIL (DEJONG'S) OR STOCKPILED NATIVE TOPSOIL. AOA TO APPROVE TOPSOIL PRIOR TO PLACEMENT.
- 6. ALL PLANTS SHOULD BE INSTALLED BETWEEN DECEMBER IST AND MARCH 15TH.
- 1. INTERMEDIATE INSPECTIONS. ALL PLANTS SHALL BE INSPECTED AND APPROVED BY THE LANDSCAPE DESIGNER AND/OR WETLAND BIOLOGIST PRIOR TO INSTALLATION. CONDITION OF ROOTS OF A RANDOM SAMPLE OF PLANTS WILL BE INSPECTED, AS WELL AS ALL ABOVEGROUND GROWTH ON ALL PLANTS. ROOTS OF ANY BARE ROOT PLANTS, IF PERMITTED FOR USE, WILL BE INSPECTED. PLANT MATERIAL MAY BE APPROVED AT THE SOURCE, AT THE DISCRETION OF THE LANDSCAPE DESIGNER AND THE WETLAND BIOLOGIST, BUT ALL MATERIAL MUST BE RE-INSPECTED AND APPROVED ON THE SITE PRIOR TO INSTALLATION. PLANT LOCATIONS SHALL ALSO BE INSPECTED AND APPROVED PRIOR TO PLANTING.
- 8. PRIOR TO INSTALLATION OF PLANT MATERIAL, THE PLANTING AREAS WILL BE LAID OUT BASED ON THE PLANTING PLAN, AND ALL HIMALAYAN BLACKBERRY, ENGLISH IVY OR OTHER INVASIVE PLANT SPECIES LOCATED IN THE PLANTING AREAS WILL BE REMOVED BY HAND.
- 9. ALL PLANTS SHALL BE PIT-PLANTED IN PLANTING PITS EXCAVATED 2X THE DIAMETER OF THE PLANT AND PLANTED IN BURLAP SACKS FILLED WITH TOPSOIL PER SPEC #5 AND BURIED IN EXISTING BEACH GRAVELS TO 2" FROM TOP OF PLANT. PLANTS SHALL BE INSTALLED 3" HIGH AND SURFACED MULCHED TO A DEPTH OF 3" WITH MEDIUM-COURSE BARK MULCH PLACED CONTINUOUSLY THROUGHOUT THE PLANTING BED.
- IO. ALL PLANTS SHALL BE NURSERY GROWN (IN WESTERN WA OR OR) FOR AT LEAST I YEAR FROM PURCHASE DATE, FREE FROM DISEASE OR PESTS, WELL-ROOTED, BUT NOT ROOT-BOUND AND TRUE TO SPECIES.
- II. PLANT LAYOUT SHALL BE APPROVED BY AOA PRIOR TO INSTALLATION AND APPROVED UPON COMPLETION OF PLANTING.
- 12. UPON COMPLETION OF PLANTING, ALL PLANTS SHALL BE THOROUGHLY WATERED.
- 13. UPON APPROVAL OF PLANTING INSTALLATION BY AOA, THE CITY OF BELLEVUE WILL BE NOTIFIED TO CONDUCT A SITE REVIEW FOR FINAL APPROVAL OF CONSTRUCTION.
- 14. MAINTENANCE SHALL BE REQUIRED IN ACCORDANCE WITH THE CITY OF BELLEVUE SENSITIVE AREAS MITIGATION GUIDELINES AND APPROVED PLANS.
- 15. AN IRRIGATION SHALL BE DESIGN/BUILT BY LANDSCAPE CONTRACTOR TO PROVIDE SEPARATE ZONE COVERAGE TO THE LAWN AREAS VERSUS THE PLANTING BEDS.
- 16. THE ZONE TO THE PLANTING BEDS SHALL BE SET TO PROVIDE 1/2" OF FLOW 2-3 TIMES WEEKLY FROM JULY I OCTOBER 31 THE FIRST YEAR AFTER PLANTING. FLOW SHALL REDUCE TO 1-2 TIMES WEEKLY THE SECOND YEAR AFTER PLANTING AND ONCE WEEKLY THE YEARS 3-5. NO FURTHER IRRIGATION IS NECESSARY AFTER THE THIRD YEAR FOR THE NATIVE PLANTING BEDS.
- 17. THE IRRIGATION SYSTEM SHALL UTILIZE MP-3 ROTARY HEADS AND WILL HAVE A RAIN SENSOR ATTACHED.
- 18. MAINTENANCE SHALL BE IMPLEMENTED ON A REGULAR BASIS ACCORDING TO THE SCHEDULE BELOW.

#### ANNUAL MAINTENANCE SCHEDULE

MAINTENANCE ITEM	J	F	М	Α	М	J	J	Α	5	0	N	D
WEED CONTROL					I	- 1	- 1	I				
GENERAL MAINT.						- 1	1	I				
WATERING - YEAR I						4	8	8	8			
WATERING - YEAR 2						4	8	8	8			
WATERING - YEARS 3-5						4	4	4	4			

I-8 = NUMBER OF TIMES TASK SHALL BE PERFORMED PER MONTH.

FIGURE 4: SPECIFICATIONS
BUFFER MITIGATION PLAN
CAPTAIN RESIDENCE
258 M. LAKE SAMMAMISH PKMY. SE
BELLEVUE, WASHINGTON
PARCEL 4253400150

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#### CONSTRUCTION MANAGEMENT

- 1. Prior to commencement of any work in the steep slope and shoreline setback enhancement areas, the clearing limits will be staked and all existing vegetation to be saved will be clearly marked. A pre-installation meeting will be held at the site to review and discuss all aspects of the project with the owner.
- 2. A biologist will supervise plan implementation during construction to ensure that objectives and specifications of the steep slope and shoreline setback enhancement plan are met.
- 3. Any necessary significant modifications to the design that occur as a result of unforeseen site conditions will be jointly approved by the City of Bellevue and the biologist prior to their implementation.

### MONITORING METHODOLOGY

- 1. The monitoring program will be conducted twice yearly (in the beginning and end of the growing season) for a period of five years, with reports submitted annually (at the end of the growing season) to the City of Bellevue.
- 2. Vegetation establishment within the steep slope and shoreline setback enhancement areas will be monitored during each field visit with a record kept of all plant species found.
- 3. Photo-points will be established from which photographs will be taken throughout the monitoring period. These photographs will document general appearance and progress in plant community establishment in the enhancement areas. Review of the photos over time will provide a semi-quantitative representation of success of the enhancement plan.

#### PERFORMANCE STANDARDS

Success of plant establishment within the steep slope and shoreline setback enhancement areas will be evaluated on the basis of percent survival of planted species.

- 1. Native woody cover will be a minimum of; 10% at construction completion, 15% at year 1, 20% at year 2, 25% at year 3 and 40% at year 5.
- 2. There will be 100% survival of all woody planted species throughout the mitigation planted area at the end of the first year of planting. For years 2-5, success will be based on an 85% survival rate or similar number of recolonized native woody plants.
- 3. Exotic and invasive plant species will be maintained at levels below 10% total cover. Removal of these species will occur immediately following the monitoring event in which they surpass the above maximum coverage. Removal will occur by hand whenever possible.

### MAINTENANCE (M) & CONTINGENCY (C)

- 1. Established performance standards for the project will be compared to the monitoring results in order to judge the success of the enhancement project.
- 2. Contingency will include many of the items listed below and would be implemented if these performance standards are not met.
- 3. Maintenance and remedial action on the site will be implemented immediately upon completion of the monitoring event, (unless otherwise specifically indicated below).
- replace dead plants with the same species or a substitute species that meet the goal of the enhancement plan (C)
- re-plant areas after reason for failure has been identified (e.q., moisture regime, poor plant stock, disease, shade/sun conditions, wildlife damage, etc.) (C)
- irrigate following plant installation for five years (M)

## PERFORMANCE BOND

- I. A performance bond or other surety device will be posted with the City of Bellevue by the applicant to cover the costs of steep slope and shoreline setback enhancement plan implementation (including labor, materials, maintenance, and monitoring).
- 2. The bond or assignment may be released in partial amounts in proportion to work successfully completed over the five year monitoring period, as the applicant demonstrates performance and corrective measures.

<u>D</u> MONITORING ₩ FIGURE 10: MAINTENANCE & BUFFER MITIGATION PLAN CAPTAIN RESIDENCE 1258 M. LAKE SAMMAMISH PELLEVUE, MASHINGTON PARCEL 9253900150

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